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NEW THRUST TOWARD SOCIAL PROBLEMS

A new thrust for the 1970's is noted in the current research and evaluative efforts of Cooperative Extension (in the past often called Agricultural and Home Economics Extension) personnel as they try to assess the role of mass media in expanded areas of work. Tichenor describes this new tone to investigations now underway as research on mass communication that deals with the problems resulting from major social issues of our time. The intent is to contribute more to the process of social decision-making (9).*

In a key position paper on environmental communication, Ross suggests there are important changes afoot even though environmental quality in the 1970's presents a paradox. In the future we will rely more on technology to solve environmental problems, than we have relied on technology in the past to develop and exploit our natural resources. This has important implications for mass communication efforts of the Cooperative Extension Service. Ross assumes that the same systems of information flow won't operate as successfully as they have in the past. For example, the Land-Grant Agricultural Colleges and Cooperative Extension Service have pioneered the system of transmitting technical information and have been brilliantly successful. As new information flow systems are developed, Ross says two vital questions should be answered: Is the inherently complex system understood by people who will make the decisions? What kind or volume of communication acts as a constraint or as a synergist on decision-making?

The flow of information is increasing, but that does not in itself mean resolution of problems. Rather it may cause the opposite effect (8).

As Watson puts it, traditionally, the Cooperative Extension Service has relied heavily on mass means of communication to reach people with information, ideas, and suggestions pertaining to the home, the family, the farm, the community, and resource development in its broadest aspects. More recently efforts have been extended to encompass a variety of public affairs issues. The negative results evident in many instances suggest that perhaps, as extension workers, too much dependence has been placed on mass communications without fully understanding human nature or the culture of the region. Extension personnel need to recognize the dual role of mass communications systems: providing for social control and providing for harmonious social change (10).

In his search for an information systems model, Lionberger senses

*Numbers in parenthesis refer to items in bibliography, beginning on page 6.

the growing specialization in organizations to supply the needed information on problems of environmental quality. Worldwide horizontal (professional to professional) communications as well as vertical (professional to laymen) communications are a major concern (5).

Mass communications have been little studied with respect to natural resource issues, contends Witt. In one of the first quantitative treatments in this area, he found an indication that relevant news flow in the press may in fact significantly aid the accomplishment of social action affecting natural resources (11). Gregory assessed the social factors influencing the effectiveness of mass media for home economics (3).

The search for consistency between adoption of innovations and traditional behavior patterns by Extension clientele relates directly to the role mass media can serve in disseminating information to solve problems. Everly contends that by understanding this search for consistency, Extension personnel will be better able to meet their clients' need for information (77).

GENERAL

Byrn (2), Myren (4), Ohliger (6), and Rogers (7) developed significant bibliographies in their respective fields concerning Extension's use of mass media.

During the 1960's Extension communication researchers used the basic SMCR (SOURCE-MESSAGE-CHANNEL-RECEIVER) communications model to design their studies. A number of efforts concentrated on the source. Representative of these are Brown (12), Greeneisen (14), Lawson and Dail (15), Nemcik (16), Rogers (18), Thomas and Evans (19), and Tichenor, Olien and Donohue (20). Many of these studies found that the source, such as the Extension agent, was also sometimes a major channel. It was Webb and Read who recognized this and concentrated on the information flow to the extension advisor. Their objective was to improve the efficiency of this information flow. This pioneer information system study does not mention mass media, as such, but is concerned with the extension advisor as a gate-keeper of information that may be channeled through mass media.

Field studies like Rieger's and Anderson's established information sources and need hierarchies that portrayed the importance of mass media. Rural dwellers tend to identify the Cooperative Extension Service as a significant source in connection with occupation, professional or farm matters, and consumer matters, while this is not so much the case for city dwellers (17).

The credibility and reliability of Cooperative Extension as a source was not challenged in the literature.

Mass media as channels came under considerable scrutine. Cooperative Extension was wary of impersonal communications after the apparent success of person-to-person communications. Numerous studies such as the ones by Bostian (22), Ross (24), and Tichenor (25) sought to determine the effec-

tiveness of mass media for Extension's work.

Summarizing several studies, Wilson concluded that the old cliche "know your audience" in order to plan effective use of mass media is always appropriate. Her findings focus on the differences that exist among people in using mass media (26).

Everly made an intensive survey between January 1962 and July 1967 of the use of mass media as a tool for continuing education instruction. He observed a gradual increase in Extension's use of the mass media as devices to help Extension's clientele to acquire information largely through individual instruction methods as opposed to group methods (23).

PRINT MEDIA

Numerous efforts have been made to study mass-produced printed matter. In Montgomery County, Ohio, Efionayi found the newsletter an effective medium for teaching homemakers of low-income families about nutrition principles. He found a positive relationship between the level of education, the motivation to read and adopt favorable action, and the amount of knowledge obtained from the newsletter (29).

Of the educational techniques used by Cooperative Extension, Oren found that clientele ranked newsletters and newspapers among the most used (31). Watson found the newsletter an excellent way to reach client groups with information. In his study, 82 percent remembered receiving copies of the newsletter, 65 percent recalled its general content, 37 percent discussed the content with friends and neighbors, and 29 percent used the newsletter as a reference in discussing public affairs (32).

Kern et al found the newsletter effective as a channel for social and economic development information in a new multi-county unit structure where conventional mass media were not able to provide avenues for deep penetration of facts (30).

Both women and men preferred the newsletter as a method of receiving Extension information according to 10 studies conducted by Brown et al (28).

In a rare study of the short Extension bulletin as a means of mass communications to the poor, Ahlschede was successful in running a pre-test with the assistance of the intended audience - low income homemakers. She discovered significant information about the audience and concluded that a bulletin with empathy for the poor would convey the message (27).

In terms of the 1970's, Felstehausen sees new opportunities and new roles for the community newspaper in the expanded thrust of Cooperative Extension into rural community development. At the present time the weekly newspapers have very little news gathering capacity. Consequently, complex and detailed community development issues are never reported. Because no one else publishes such information, local citizens are cut off from in-depth reporting of changes in local organization and environment. He suggests experimental studies to see how this task can be accomplished with existing

personnel and resources (36).

Looking at controversial environmental issues, Donohue et al found that persons with more "extreme" attitudes, identified by their concern about issues such as the placement of a nuclear power plant, would have more thorough understanding of the articles read. They cite the possibility that selective tendencies to distort information may be counterbalanced by the even stronger tendencies to accurately acquire information on all sides of an issue so that one might be better equipped to defend a given position (33).

Evans (34 and 35), Heasley (37), Tichenor (38), and White (39) used different approaches to evaluate newspapers as channels for Extension information. With fewer farmers, there has been a decline in the use of hard technical agricultural information. However, newspapers are using more information from Extension in nutrition, community development and other expanded non-technical agriculture areas.

RADIO

A number of studies indicate that Extension has found the "hidden medium" -- radio -- a successful channel. The newest wrinkle is in the training of Extension personnel to use the medium. Marsh and Hyman (46) confirmed previous studies by Tait (49) that programmed instruction was as effective as workshop instruction in increasing the Extension agents' knowledge of radio, developing more positive attitudes toward the use of radio in Extension teaching, and changing the agents' concepts of their ability to do radio teaching. Programmed instruction seems to offer possibilities in inservice training by eliminating difficulties caused by distance, varying experience, levels of knowledge, and the delay in getting new agents into group training.

A case study of rapid, effective communication by two-way radio is reported by Swoboda. By using a two-way microwave network in Nebraska, specialized expertise was extended to solve local problems and to increase the service to Extension's clientele (48).

TELEVISION

In extensive television programs produced by Extension in Missouri, Gregory observed that county staffs spent six to twelve months in planning to fully use the televised effort. Some staffs could have used more time (58). The importance of lead time is confirmed by Alexander (50), Brown (52), Eschler (53), and Heasley (59). Worrall found knowledge about specific recommended practices in gardening and ornamental horticulture could be successfully communicated through the use of open-circuit television. The amount of increase in knowledge is influenced by the socio-economic characteristics and the communication habits of the viewer (67).

Deutschmann and McNelly conducted a detailed study of Michigan's 4-H TV Electrical Club, the forerunner of present television offerings by Extension for 4-H members and leaders. Results indicate that a program with substantial education content would attract, interest, inform, and influence 4-H members even if they were viewing individually in their homes rather than with their standard 4-H Club group (56).

In summarizing her own televised nutrition work along with other studies, Medved concluded that television was effeciive in teaching home economics and related subjects (64). However, Brown, et al, reported unsatisfactory results with a program to help 1400 homemakers better manage their day. A workbook was rated more helpful than the televised programs. Very few of the homemakers did any of the homework suggested (52).

Woods reports excellent use of public service spot announcements distributed by Extension to commercial television stations (66).

TELE-LECTURE

In the late 1960's, Extension workers became interested in the telephone as a means of mass communication. Blackwood and Trent concluded that tele-lecture was as effective as face-to-face contact in regard to the amount of learning that can be expected (68). Comparing tele-lecture with conventional lecture, Eubank and Baker found no significant differences (69). McKay reports success in a case study of the tele-lecture technique that included as many as nine remote groups at a time.

REACHING SPECIALIZED AUDIENCES

Extension's attention has turned from mass media for mass audience to mass media for specialized audiences. Pates' study of rural poverty and low-income groups is an example. Communicators need to recognize an important psychological aspect in communicating with low-income audiences... that of fear...fear of being identified with an economically disadvantaged group (83).

Scherer documents the problems in developing a film system to reach the hard to reach with hard to teach information in the Expanded Foods and Nutrition Project of the Cooperative Extension Service. Assuming the system must contain elements of the medium most utilized by the low-income audience--that of television--Scherer's case study shows how mass produced components of a Super 8 film system is now in use to reach a potential audience of 1.8 million needy Illinois residents (85).

Extension staff working with low-income farmers must identify and use "convenient" information sources for this particular clientele. "Convenience," according to Lee, is a very strong factor in a low-income farmer's judgment of a particular information source. Lee concludes that because there is no single total low-income farm audience, there is no one communication strategy that can be used. There must be as many strategies as there are audiences. Communication strategies must be flexible to meet the specific conditions needed to communicate with each audience (81).

Suburbanites can be served by Extension with mass media and specialized media campaigns observed Troldahl during his "two-step flow" study in Massachusetts. He found that followers, as well as opinion leaders, apparently can be reached directly through mediated communication without much personal contact (86).

Turning to technical agriculture, Verner and Gubbels conducted an experiment exploring the adoption of innovations by dairy farmers. They found that at the awareness stage, the mass media were the most important and constituted about 55 percent of all the sources reported. This use of the mass media showed a sharp decline to the interest stage, followed by a gradual drop in use to the trial stage and no use of mass media reported at the adoption stage (87). This pattern of mass media use is consistent with previous research identified in the bibliography developed by Rogers (7).

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